



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/876,793

06/07/2001

Kang Soo Seo

2080-3-25

9026

35884

7590

11/21/2007

LEE, HONG, DEGERMAN, KANG & SCHMADEKA

660 S. FIGUEROA STREET

Suite 2300

LOS ANGELES, CA 90017

EXAMINER

SHELEHEDA, JAMES R

ART UNIT

PAPER NUMBER

2623

MAIL DATE

DELIVERY MODE

11/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/876,793

Applicant(s)

SEO ET AL.

Examiner

James Sheleheda

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20,22,25-27 and 30-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20,22,25-27 and 30-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/11/07 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 10/11/07 have been fully considered but are not persuasive.

On pages 9-11, of applicant's response, applicant argues that Takahashi fails to disclose menu management information that provides an index to menu data that includes one or more thumbnails pictures that correspond to playback units with each thumbnail stored as a block of menu data or reproducing at least one thumbnail picture in the menu data based on the menu management information.

In response, Takahashi specifically discloses "menu management information that provides an index to menu data" as Takahashi discloses OSD picture array data indicating an index of pictures to display and their corresponding positions on the screen (column 6, lines 5-61, column 8, lines 36-51 and column 12, lines 24-53).

Further, the menu data clearly includes "one or more thumbnail pictures that correspond to playback units with each thumbnail stored as a block of menu data" as Takahashi clearly discloses wherein the menu data includes *thumbnail images* stored on the disk (column 12, lines 7-56) and that these thumbnail images specifically correspond to video streams within the disk (column 12, lines 7-23).

Finally, the system performs "reproducing at least one thumbnail picture in the menu data based on the menu management information" as Takahashi clearly discloses wherein the thumbnails images are reproduced on the display (Fig. 3; column 6, lines 5-33 and column 12, lines 32-53) based upon the OSD picture array data indicating specific thumbnails corresponding to the video streams (Fig. 3; column 6, lines 5-33, column 12, lines 24-56).

Therefore, applicant's arguments are not persuasive.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2623

4. Claims 20, 25-27, 30-33, 35-37, 39-41, 43-45 and 47-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al. (Takahashi) (6,483,983) (of record).

As to Claim 20, Takahashi discloses a recording medium having a data structure for managing reproduction of menu data, comprising:

a video data storing area storing one or more playback units of video data (disk area dedicated to storing recorded video; column 9, lines 18-31 and lines 52-61);

a menu data storing area storing menu data comprising one or more thumbnail pictures corresponding to each playback units together (thumbnails also recorded on the disk; column 12, lines 7-62) and each thumbnail stored as a block of menu data (picture array menu; column 2, lines 32-54 and column 9, lines 8-51 and column 12, lines 32-56); and

a menu management area storing menu management information, the menu management information providing an index to menu data (column 9, lines 8-51 and column 12, lines 20-23 and 49-56),

wherein at least one thumbnail in the menu data is reproduced based on the menu management information (column 5, line 21-column 7, line 7).

Claims 30-33 correspond to Claim 20. Thus, each is analyzed and rejected as previously discussed. (**Note:** the "driver" and "controller" components to read/write data of claims 31 and 33 are disclosed at column 3, line 63-column 4, line 33, column 7, lines 50-57 and column 9, lines 22-31).

As to claims 25, 35, 39, 43 and 47 it is inherent the disk of Takahashi indicate the number of reduced pictures stored in the array. When the array data is stored on the DVD, there must be some form of information which reflects the number of reduced pictures stored on said DVD, as the picture array reflects a defined number of displayed images and positions. (See Fig. 3; column 5, lines 21-48) Accordingly, Takahashi anticipates each and every limitation of Claim 25.

As to claims 26, 36, 40, 44 and 48, Takahashi further teaches the use of "head indexing," a well-known technique in video reproduction. Head indexing is a process by which addresses are attached to various frames in a data stream, thereby providing quick access to desired frames (i.e., the reduced pictures) in the picture array. (Col. 1, Ln. 27-44). Although Takahashi appears to only teach a starting address of a frame displayed in the array, this address would, in essence, be a starting and ending address since a "frame" is a defined point (i.e., beginning and end) in the data stream. Following this logic, it would be inherent that the addresses (i.e., frames) indicate the number of frames stored on the DVD. Accordingly, Takahashi anticipates each and every limitation of Claim 26.

As to claims 27, 37, 41, 45 and 49, since each frame (i.e., thumbnail) in the array has a corresponding address identifier, it is inherent the array include said starting addresses. Accordingly, Takahashi anticipates each and every limitation of Claim 27.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 22, 34, 38, 42 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi in view of Chen et al. (Chen) (5,917,830) (of record).

As to claims 22, 34, 38, 42 and 46, as indicated above, Takahashi anticipates each and every claim limitation except wherein the menu data area records padding data between at least two of the blocks of menu data. However, within the same field of endeavor, Chen discloses a similar system wherein null packets are inserted (i.e., appended) into the video stream for the purpose of preventing buffer overload. (Abstract; Col. 2, Ln. 40-54). The exact placement of such null packets is obvious and a matter of simple design choice. Accordingly, it would have been obvious to one of ordinary skill in this art at the time of Applicant's invention to combine the systems of Takahashi and Chen in order to prevent RAM buffer overload through utilizing null data packets appended to each menu picture data.

***Conclusion***

7. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of

Art Unit: 2623

mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### **Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on \_\_\_\_\_.  
(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

Signature: \_\_\_\_\_

Registration Number: \_\_\_\_\_

### **Certificate of Transmission**

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. ( ) \_\_\_\_\_ - \_\_\_\_\_ on \_\_\_\_\_.  
(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

Signature: \_\_\_\_\_

Registration Number: \_\_\_\_\_

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.



Art Unit: 2623


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James Sheleheda  
Patent Examiner  
Art Unit 2623

JS

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600